REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

I.   STATUS OF THE CLAIMS AND FORMAL MATTERS.

Claims 25, 27-45, 51-58 and 70-84 are pending. Claims 25, 51-53, 70, 72-74, 78-80, 83 and 84 are independent. Claims 53 and 70 are hereby amended. No new matter has been introduced.

It is submitted that these claims, as originally presented, were in full compliance with the requirements of 35 U.S.C. §112. Changes to claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

II.   REJECTIONS UNDER 35 U.S.C. §103(a)

Claims 25, 27-45, 51 and 52 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Applicants' admitted prior art ("AAPA")in view of U.S. Patent No. 6,404,901 to Itokawa (hereinafter, merely "Itokawa").

Claims 53-58 and 70-84 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Applicants' admitted prior art in view of U.S. Patent No. 5,812,787 to Astle (hereinafter, merely "Astle").

III.   RESPONSE TO REJECTIONS

Claim 25 recites, *inter alia:*

"A signal processing apparatus comprising:

a signal acquiring unit configured to acquire second signals of a second dimension by projecting first signals as real-world signals of a first dimension on a sensor and by detecting the mapped signals by said sensor, said second dimension being lower than said first dimension; and

a signal processor configured to extract significant information, buried by said projection from said second signals, by performing signal processing which is based on said second signals,

and adjust distortion produced by projection according to the significant information." (Emphasis added)

In paragraph 3 of the Office Action, the Examiner contends that the AAPA discloses adjusting distortion produced by projection according to the significant information. Applicants respectfully disagree.

Although paragraph 8 of the Background Art briefly discusses that the data, distorted by projection, also includes the significant information for correcting the distortion, it does not teach or suggest how the correction of distortion is carried out.

Therefore, Applicants respectfully submit that Itokawa and AAPA fail to teach or suggest the above-identified features of claim 25. Specifically, there is no teaching or suggestion of a signal processing apparatus comprising a signal processor configured to extract significant information, buried by said projection from said second signals, by performing signal processing which is based on said second signals, and adjust distortion produced by projection according to the significant information, as recited in claim 25.

Therefore, Applicants submit that independent claim 25 is patentable.

For reasons similar to, or somewhat similar to, those described above with regard to independent claim 25, independent claims 51 and 52 are also believed to be patentable.

Claim 53 recites, *inter alia:*

"A signal processing apparatus comprising:

a signal acquisition unit configured to acquire a second signal by detecting a first signal as a real world signal of a first dimension by a sensor, said second signal being of a second dimension lower than said first dimension and containing distortion caused by integrating effects of said sensor with respect to said first signal; and

a signal processor configured to extract significant information, buried by projection from said second signal, by performing signal processing on said second signal, and to generate a third signal alleviated in distortion caused by integrating effects of said sensor as compared to said second signal according to the significant information." (Emphasis added)

As understood by Applicants, Astle relates to an encoding system which determines a relatively fixed background of the sequence of pictures, and transmits the background to a decoding system. Foreground objects of a current picture are separated from the background, and motion compensation encoding of the foreground objects is performed with respect to at least one previous picture. The encoded foreground objects are then transmitted to the decoding system.

Applicants respectfully submit that Astle and AAPA fail to teach or suggest the above-identified features of claim 53. Specifically, there is no teaching or suggestion of a signal processing apparatus comprising a signal acquisition unit configured to acquire a second signal by detecting a first signal as a real world signal of a first dimension by a sensor, said second signal being of a second dimension lower than said first dimension and containing distortion *caused by integrating effects of said sensor* with respect to said first signal; and a signal

processor configured to extract significant information, buried by projection from said second signal, by performing signal processing on said second signal, and to generate a third signal alleviated in distortion as compared to said second signal according to the significant information, as recited in claim 53. Applicants submit that the motion compensation of Astle is completely different than the claimed alleviated distortion, as claimed in claim 53. Specifically, the background and foreground changes does not teach or suggest generating a third signal with alleviated distortion caused by integrating effects of the sensor, as recited in claim 53.

Therefore, Applicants submit that independent claim 53 is patentable.

Claim 70 recites, *inter alia:*

"A signal processing apparatus...comprising:

a separating unit configured to separate said mixed area in units of a pixel into said foreground object component and said background object component based on the specified results by said area specifying unit and said mixing ratio."
(Emphasis added)

Applicants respectfully submit that Astle and AAPA fail to teach or suggest the above-identified features of claim 70. Specifically, there is no teaching or suggestion of a signal processing apparatus comprising a separating unit configured to separate said mixed area in units of a pixel into said foreground object component and said background object component based on the specified results by said area specifying unit and said mixing ratio, as recited in claim 70. Specifically, Applicants submit that Astle fails to teach or suggest separating the mixed area in units of a pixel into foreground object component and background object component based on the mixture ratio, as recited in claim 70.

Therefore, Applicants submit that independent claim 70 is patentable.

For reasons similar to, or somewhat similar to, those described above with regard to independent claim 70, independent claims 72, 73, 80, 83 and 84 are also believed to be patentable.

Claim 74 recites, *inter alia:*

"A signal processing apparatus...comprising:

a mixing ratio detecting unit configured to detect a mixing ratio between said foreground object components and said background object components at least in said mixed area based on the results specified by said area specifying unit and areas before and after said mixed area." (Emphasis added)

Applicants respectfully submit that Astle and AAPA fail to teach or suggest the above-identified features of claim 74. Specifically, there is no teaching or suggestion of a signal processing apparatus comprising a mixing ratio detecting unit configured to *detect a mixing ratio between said foreground object components and said background object components* at least in said mixed area based on the results specified by said area specifying unit and areas before and after said mixed area, as recited in claim 74. This feature is also shown in Fig. 42 of the Application as originally filed, which is not disclosed or suggested in Astle and AAPA.

Therefore, Applicants submit that independent claim 74 is patentable.

For reasons similar to, or somewhat similar to, those described above with regard to independent claim 74, independent claims 78 and 79 are also believed to be patentable.

Therefore, Applicants submit that independent claims 25, 51-53, 70, 72-74, 78-80, 83 and 84 are patentable.

IV.   **DEPENDENT CLAIMS**

The other claims are dependent from one of the independent claims, discussed above, and are therefore believed patentable for at least the same reasons. Since each dependent

claim is also deemed to define an additional aspect of the invention, however, the individual

reconsideration of the patentability of each on its own merits is respectfully requested.
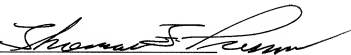
CONCLUSION

In the event the Examiner disagrees with any of statements appearing above with

respect to the disclosure in the cited reference or references, it is respectfully requested that the

Examiner specifically indicate those portions of the reference or references providing the basis

for a contrary view.

In view of the foregoing amendments and remarks, it is believed that all of the

claims in this application are patentable and Applicants respectfully request early passage to

issue of the present application.

Please charge any additional fees that may be needed, and credit any

overpayment, to our Deposit Account No. 50-0320.

Respectfully submitted,

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